

121, 122, 126, 127, 128, 129, 132, 139, 157, 159, 163 and 166, according to the numbering of SEQ ID NO: 4, is substituted with a non-conservative amino acid.

60. A variant of an OB polypeptide, capable of modulating body weight, comprising amino acids 22-166 of SEQ ID NO: 5 or 6 wherein one or more amino acids selected from the group consisting of amino acids 52, 55, 70, 84, 88, 91, 94, 97, 109, 117, 120, 121, 125, 126, 127, 128, 131, 138, 156, 158, 162 and 165, according to the numbering of SEQ ID NO: 6, is substituted with a non-conservative amino acid.

61. The OB polypeptide of claim 59 having an N-terminal methionine or an N-terminal polyaminoacid.

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various*
62. The OB polypeptide of claim 60 having an N-terminal methionine or an N-terminal polyaminoacid.

63. A recombinant OB polypeptide according to any of claims 59-62.

64. A chemically synthesized OB polypeptide according to any of claims 59-62.

65. A pharmaceutical composition comprising the OB polypeptide of any of claims 59-62 and a pharmaceutically acceptable carrier.--